

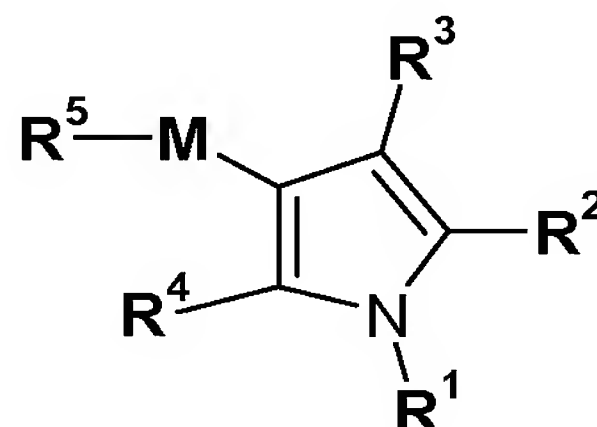
In the Claims

The listing of claims will replace all prior versions and listings of claims in the application.

Listings of claims

1. (currently amended) A method of antagonising gonadotropin releasing hormone activity in a patient, comprising administering a compound of formula (I):

~~The use of a compound of Formula (I),~~



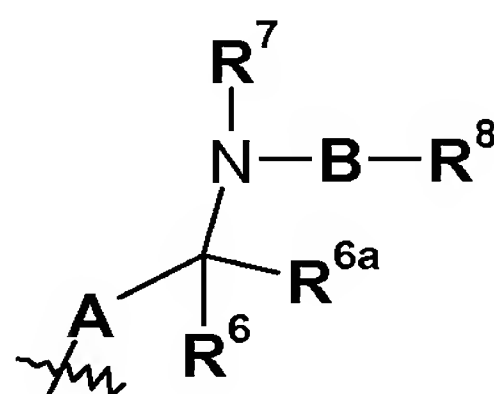
Formula (I)

wherein:

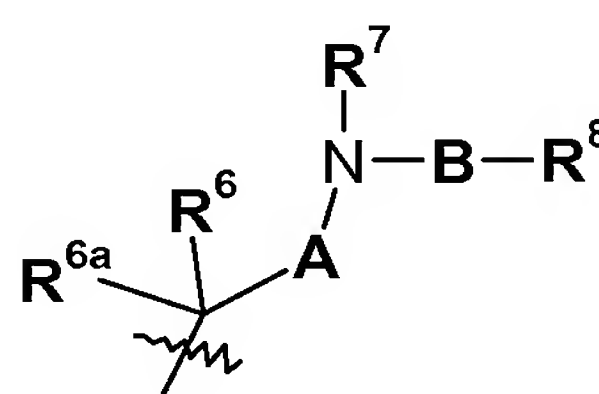
R¹ is selected from: hydrogen, optionally substituted C₁₋₆alkyl, optionally substituted aryl or optionally substituted arylC₁₋₆alkyl, wherein the optional substituents are selected from C₁₋₄alkyl, nitro, cyano, fluoro and C₁₋₄alkoxy;

R² is an optionally substituted mono or bi-cyclic aromatic ring, wherein the optional substituents are 1, 2 or 3 ~~substituents~~ substituents independently selected from: cyano, **R^eR^fN-**, C₁₋₆alkyl, C₁₋₆alkoxy, halo, haloC₁₋₆alkyl or haloC₁₋₆alkoxy wherein **R^e** and **R^f** are independently selected from hydrogen, C₁₋₆alkyl or aryl;

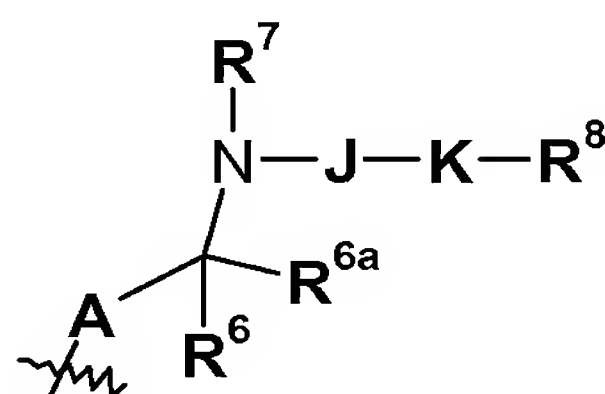
R³ is selected from a group of Formula (IIa) to Formula (II d):



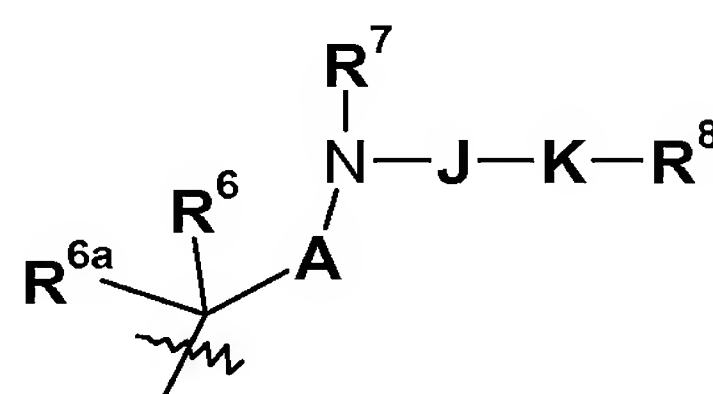
Formula (IIa)



Formula (IIb)

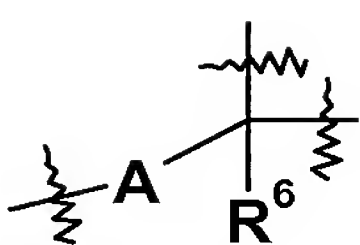


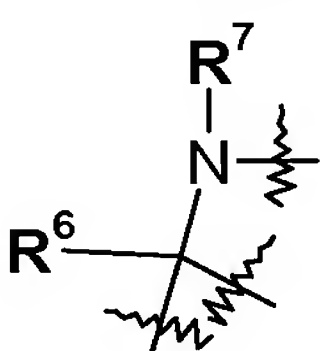
Formula (IIc)



Formula (IId)

where **R⁶** and **R^{6a}** are independently selected from hydrogen, fluoro, optionally substituted C₁₋₆alkyl, C₁₋₆alkoxy, or **R⁶** and **R^{6a}** taken together and the carbon atom to which they are attached form a carbocyclic ring of 3-7 atoms or **R⁶** and **R^{6a}** taken together and the carbon atom to which they are attached form a carbonyl group;

or when **A** is not a direct bond the group  forms a carbocyclic ring of 3-7 carbon atoms or a heterocyclic ring containing one or more heteroatoms;

or the group  forms a heterocyclic ring containing 3-7 carbon atoms and one or more heteroatoms;

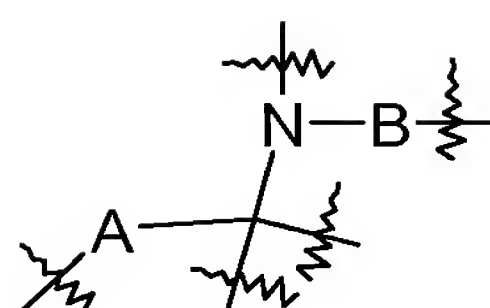
R⁷ is selected from: hydrogen or C₁₋₆alkyl;

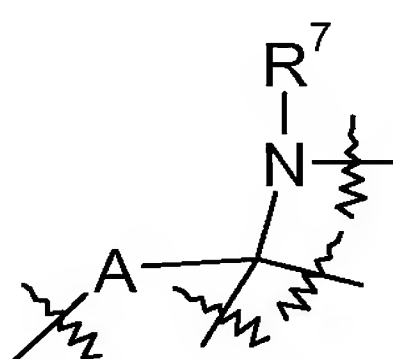
R⁸ is selected from:

- (i) hydrogen, C₁₋₆alkyl, C₂₋₆alkenyl, C₂₋₆alkynyl, haloC₁₋₆alkyl, C₁₋₄alkoxyC₁₋₄alkyl, hydroxy, hydroxyC₁₋₆alkyl, cyano, N-C₁₋₄alkylamino, N,N-di-C₁₋₄alkylamino, C₁₋₆alkyl-S(O_n)-, -O-**R**^b, -N**R**^b**R**^c, -C(O)-**R**^b, -C(O)O-**R**^b, -CON**R**^b**R**^c, NH-C(O)-**R**^b or -S(O_n)N**R**^b**R**^c,
where **R**^b and **R**^c are independently selected from hydrogen and C₁₋₆alkyl optionally substituted with hydroxy, amino, N-C₁₋₄alkylamino, N,N-di-C₁₋₄alkylamino, HO-C₂₋₄alkyl-NH- or HO-C₂₋₄alkyl-N(C₁₋₄alkyl)-;
- (ii) nitro when **B** is a group of Formula (IV) and **X** is CH and **p** is 0;
- (iii) carbocyclyl (such as C₃₋₇cycloalkyl or aryl) or arylC₁₋₆alkyl each of which is optionally substituted by **R**¹², or **R**¹³;
- (iv) heterocyclyl or heterocyclylC₁₋₆alkyl each of which is optionally substituted by up to 4 substituents independently selected from **R**¹² or **R**¹³, and where any nitrogen atoms within a heterocyclyl group are, where chemically allowed, optionally in their oxidised (N→O, N-OH) state;

A is selected from:

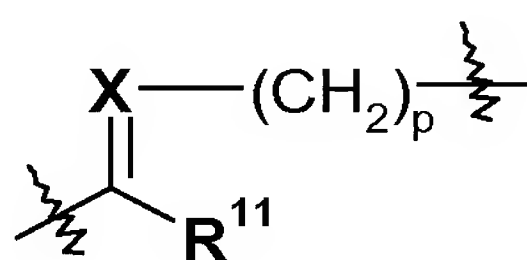
- (i) a direct bond;
- (ii) optionally substituted C₁₋₅alkylene wherein the optional substituents are independently selected from: hydroxy, hydroxyC₁₋₆alkyl, C₁₋₆alkyl, C₁₋₆alkoxy, C₁₋₄alkoxyC₁₋₄alkyl, aryl or arylC₁₋₆alkyl;
- (iii) a carbocyclic ring of 3-7 atoms;
- (iv) a carbonyl group or -C(O)-C(**R**^d**R**^d)-, wherein **R**^d is independently selected from hydrogen and C₁₋₂alkyl;

or when \mathbf{R}^3 is a group of Formula (IIa) or (IIb), the group  forms a heterocyclic ring containing 3-7 carbon atoms and one or more heteroatoms;

or when \mathbf{R}^3 is a group of Formula (IIa), (IIb), (IIc) or (IId), the group  forms a heterocyclic ring containing 3-7 carbon atoms and one or more heteroatoms;

B is selected from:

- (i) a direct bond;
- (ii) a group of Formula (IV)



Formula (IV)

wherein:

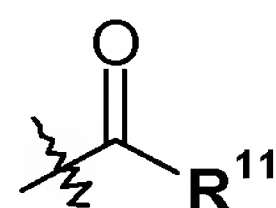
X is selected from N or CH,

wherein at position (a) Formula (IV) is attached to the nitrogen atom and the $(\text{CH}_2)_p$ group is attached to \mathbf{R}^8 ; and

- (iii) a group independently selected from: optionally substituted C_{1-6} alkylene, optionally substituted C_{3-7} cycloalkyl, optionally substituted C_{3-6} alkenylene, optionally substituted C_{3-6} alkynyl, $(\text{C}_{1-5}\text{alkyl})_{aa}\text{-S(O}_n\text{)-}(\text{C}_{1-5}\text{alkyl})_{bb}\text{-}$, $\text{-(C}_{1-5}\text{alkyl})_{aa}\text{-O-(C}_{1-5}\text{alkyl})_{bb}\text{-}$, $\text{-(C}_{1-5}\text{alkyl})_{aa}\text{-C(O)-}(\text{C}_{1-5}\text{alkyl})_{bb}\text{-}$ or $(\text{C}_{1-5}\text{alkyl})_{aa}\text{-N(R}^{17}\text{)-}(\text{C}_{1-5}\text{alkyl})_{bb}\text{-}$, or $\text{-(C}_{1-5}\text{alkyl})_{aa}\text{-C(O)NH-(C}_{1-5}\text{alkyl})_{bb}\text{-}$

where \mathbf{R}^{17} is hydrogen or C_{1-4} alkyl, or where \mathbf{R}^{17} and the $(\text{C}_{1-5}\text{alkyl})_{aa}$ or $(\text{C}_{1-5}\text{alkyl})_{bb}$ chain can be joined to form a heterocyclic ring, wherein aa and bb are independently 0 or 1 and the combined length of $(\text{C}_{1-5}\text{alkyl})_{aa}$ and $(\text{C}_{1-5}\text{alkyl})_{bb}$ is less than or equal to C_5 alkyl and wherein the optional substituents are independently selected from \mathbf{R}^{12} ;

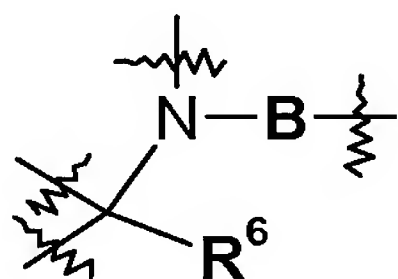
or the group -B-R^8 represents a group of Formula (V)



Formula (V);



or the group together forms an optionally substituted heterocyclic ring containing 4-7 carbons atoms, wherein the optional substituents are selected from 1 or 2 substituents independently selected from \mathbf{R}^{12} and \mathbf{R}^{13} ;

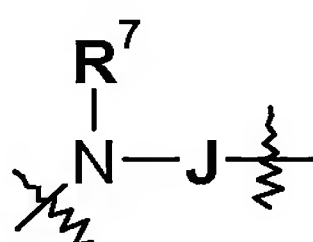


or the group forms a heterocyclic ring containing 3-7 carbon atoms and one or more heteroatoms;

\mathbf{R}^{11} is selected from: hydrogen, optionally substituted C_{1-6} alkyl, $\text{N}(\mathbf{R}^{23}\mathbf{R}^{24})$ or $\text{NC}(\text{O})\text{OR}^{25}$, where \mathbf{R}^{23} , \mathbf{R}^{24} and \mathbf{R}^{25} are independently selected from: hydrogen, hydroxy, optionally substituted C_{1-6} alkyl, optionally substituted aryl, optionally substituted aryl C_{1-6} alkyl, an optionally substituted carbocyclic ring of 3-7 atoms, optionally substituted heterocyclyl or optionally substituted heterocyclyl C_{1-6} alkyl or \mathbf{R}^{23} and \mathbf{R}^{24} taken together with the nitrogen atom to which they are attached, can form an optionally substituted ring of 3-10 atoms,

wherein the optional substituents are selected from \mathbf{R}^{12} and $\text{---}\mathbf{K}-\mathbf{R}^8$ where K and \mathbf{R}^8 are as defined herein;

J is a group of the formula: $-(\text{CH}_2)_s-\mathbf{L}-(\text{CH}_2)_s-$ or $-(\text{CH}_2)_s-\text{C}(\text{O})-(\text{CH}_2)_s-\mathbf{L}-(\text{CH}_2)_s-$ wherein when **s** is greater than 0, the alkylene group is optionally substituted,



or the group together forms an optionally substituted heterocyclic ring containing 4-7 carbons atoms, wherein the optional substituents are selected from 1 or 2 substituents independently selected from \mathbf{R}^{12} and \mathbf{R}^{13} ;

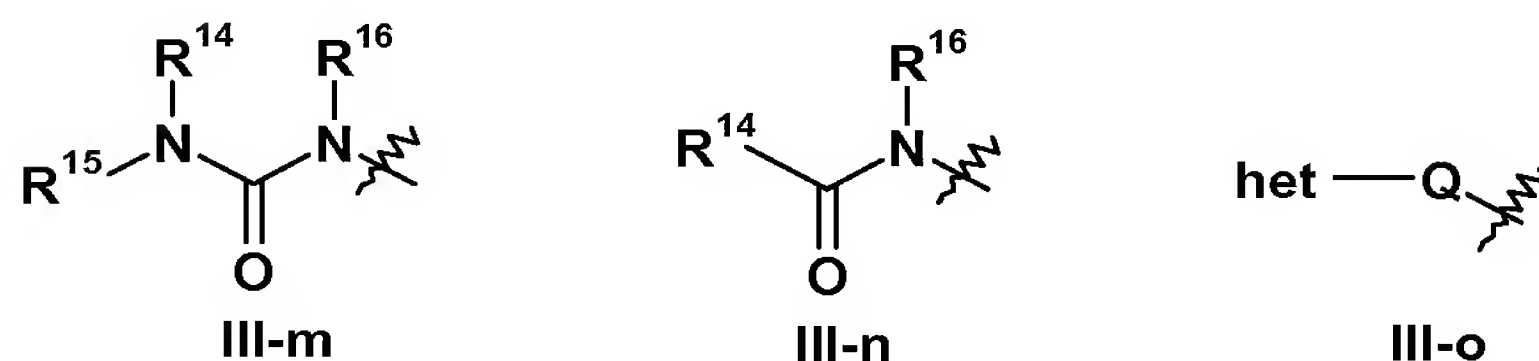
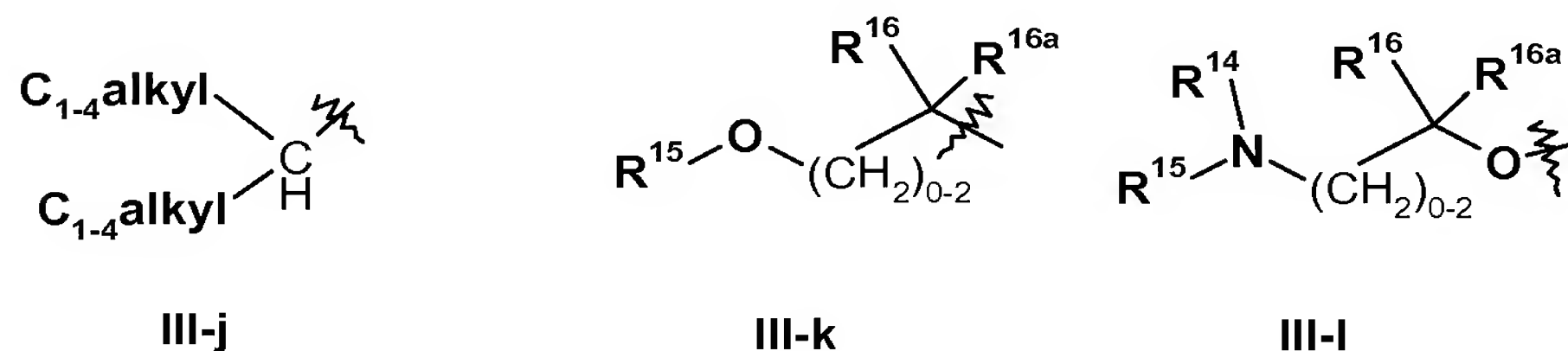
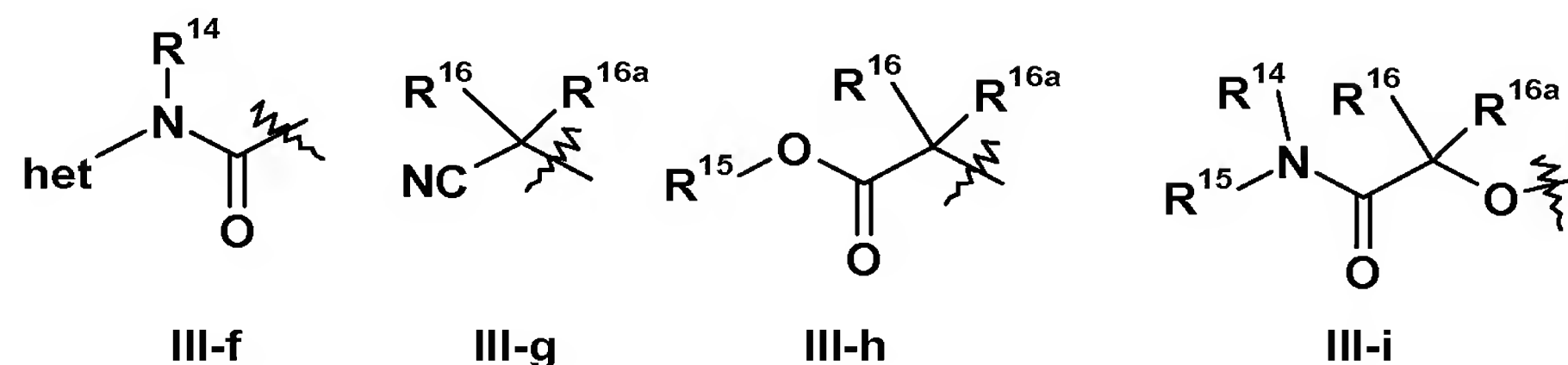
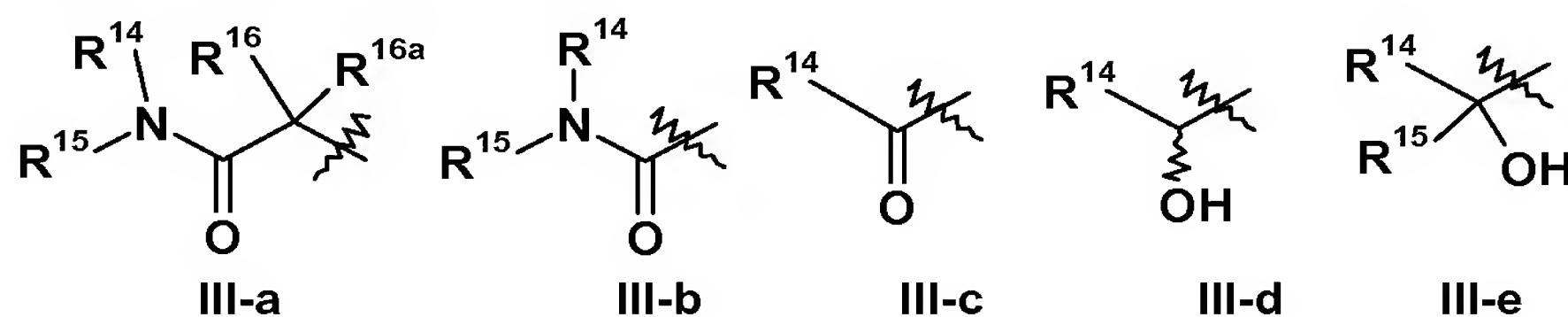
K is selected from: a direct bond, $-(\text{CH}_2)_{s1}-$, $-(\text{CH}_2)_{s1}-\text{O}-(\text{CH}_2)_{s2}-$, $-(\text{CH}_2)_{s1}-\text{C}(\text{O})-(\text{CH}_2)_{s2}-$, $-(\text{CH}_2)_{s1}-\text{S}(\text{O}_n)-(\text{CH}_2)_{s2}-$, $-(\text{CH}_2)_{s1}-\text{N}(\mathbf{R}^{17a})-(\text{CH}_2)_{s2}-$, $-(\text{CH}_2)_{s1}-\text{C}(\text{O})\text{N}(\mathbf{R}^{17a})-(\text{CH}_2)_{s2}-$, $-(\text{CH}_2)_{s1}-\text{N}(\mathbf{R}^{17a})\text{C}(\text{O})-(\text{CH}_2)_{s2}-$, $-(\text{CH}_2)_{s1}-\text{N}(\mathbf{R}^{17a})\text{C}(\text{O})\text{N}(\mathbf{R}^{17a})-(\text{CH}_2)_{s2}-$, $-(\text{CH}_2)_{s1}-\text{OC}(\text{O})-(\text{CH}_2)_{s2}-$, $-(\text{CH}_2)_{s1}-\text{C}(\text{O})\text{O}-(\text{CH}_2)_{s2}-$, $-(\text{CH}_2)_{s1}-\text{N}(\mathbf{R}^{17a})\text{C}(\text{O})\text{O}-(\text{CH}_2)_{s2}-$, $-(\text{CH}_2)_{s1}-\text{OC}(\text{O})\text{N}(\mathbf{R}^{17a})-(\text{CH}_2)_{s2}-$, $-(\text{CH}_2)_{s1}-\text{OS}(\text{O}_n)-(\text{CH}_2)_{s2}-$, or $-(\text{CH}_2)_{s1}-\text{S}(\text{O}_n)-\text{O}-(\text{CH}_2)_{s2}-$, $-(\text{CH}_2)_{s1}-\text{S}(\text{O})_2\text{N}(\mathbf{R}^{17a})-(\text{CH}_2)_{s2}-$ or $-(\text{CH}_2)_{s1}-\text{N}(\mathbf{R}^{17a})\text{S}(\text{O})_2-(\text{CH}_2)_{s2}-$; wherein the $-(\text{CH}_2)_{s1}-$ and $-(\text{CH}_2)_{s2}-$ groups are independently optionally substituted by hydroxy or C_{1-4} alkyl and wherein when $s1 > 1$ or $s2 > 1$ then the CH_2 group can optionally be a branched chain.;

where \mathbf{R}^{17a} is hydrogen or C_{1-4} alkyl;

L is selected from optionally substituted aryl or optionally substituted heterocyclyl;

R^4 is selected from hydrogen, C_{1-4} alkyl or halo;

R^5 is selected from a group of Formula III-a; III-b; III-c; III-d; III-e; III-f, III-g, III-h, III-i, or III-j, III-k, III-l, III-m, III-n or III-o



wherein:

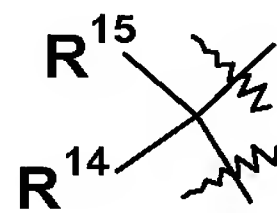
het represents an optionally substituted 3- to 8-membered heterocyclic ring containing from 1 to 4 heteroatoms independently selected from O, N and S, wherein the optional substituents are selected from 1-2 groups selected from R^{12} and R^{13} ; and

Q is selected from a direct bond or $-[C(R^{16}R^{16a})]_{1-2}$;

R^{14} and R^{15} are selected from:

- (i) R^{14} selected from hydrogen; optionally substituted C_{1-8} alkyl; optionally substituted aryl; $-R^d$ -Ar, where R^d represents C_{1-8} alkylene and Ar represents optionally substituted aryl; and optionally substituted 3- to 8-membered heterocyclic ring optionally containing from 1 to 3 further heteroatoms independently selected from O, N and S; and R^{15} is selected from hydrogen; optionally substituted C_{1-8} alkyl and optionally substituted aryl;

- (ii) wherein the group of Formula (III) represents a group of Formula **III-a**, **III-b**, **III-i**, **III-l** or **III-m**, then the group $\text{NR}^{14}(-\text{R}^{15})$ represents an optionally substituted 3- to 8-membered heterocyclic ring optionally containing from 1 to 3 further heteroatoms independently selected from O, N and S; or

- (iii) wherein the group of Formula (III) represents structure **III-e**,  represents an optionally substituted 3- to 8-membered heterocyclic ring optionally containing from 1 to 4 heteroatoms independently selected from O, N and S;

R^{16} and R^{16a} are independently selected from:

- (i) hydrogen or optionally substituted C_{1-8} alkyl; or
(ii) R^{16} and R^{16a} together with the carbon to which they are attached form an optionally substituted 3 to 7-membered cycloalkyl ring;

R^{12} is independently selected from: halo, hydroxy, hydroxy C_{1-6} alkyl, oxo, cyano, cyano C_{1-6} alkyl, nitro, carboxyl, C_{1-6} alkyl, C_{1-6} alkoxy, C_{1-6} alkoxy C_{1-4} alkyl, C_{1-6} alkoxycarbonyl C_{0-4} alkyl, C_{1-6} alkanoyl C_{0-4} alkyl, C_{1-6} alkanoyloxy C_{0-4} alkyl, C_{2-6} alkenyl, C_{1-3} perfluoroalkyl-, C_{1-3} perfluoroalkoxy, aryl, aryl C_{1-6} alkyl, heterocyclyl, heterocyclyl C_{1-6} alkyl, amino C_{0-4} alkyl, N- C_{1-4} alkylamino C_{0-4} alkyl, N,N-di- C_{1-4} alkylamino C_{0-4} alkyl, carbamoyl, N- C_{1-4} alkylcarbamoyl C_{0-2} alkyl, N,N-di- C_{1-4} alkylaminocarbamoyl C_{0-2} alkyl, aminocarbonyl C_{0-4} alkyl, N- C_{1-6} alkylaminocarbonyl C_{0-4} alkyl, N,N- C_{1-6} alkylaminocarbonyl C_{0-4} alkyl, C_{1-6} alkyl-S(O) $_n$ -amino C_{0-4} alkyl-, aryl-S(O) $_n$ -amino C_{0-2} alkyl-, C_{1-3} perfluoroalkyl-S(O) $_n$ -amino C_{0-2} alkyl-, C_{1-6} alkylamino-S(O) $_n$ - C_{0-2} alkyl-, arylamino-S(O) $_n$ - C_{0-2} alkyl-, C_{1-3} perfluoroalkylamino-S(O) $_n$ - C_{0-2} alkyl-, C_{1-6} alkanoylamino-S(O) $_n$ - C_{0-2} alkyl-, arylcarbonylamino-S(O) $_n$ - C_{0-2} alkyl-, C_{1-6} alkyl-S(O) $_n$ - C_{0-2} alkyl-, aryl-S(O) $_n$ - C_{0-2} alkyl-, C_{1-3} perfluoroalkyl-, C_{1-3} perfluoroalkoxy C_{0-2} alkyl; $\text{R}^9\text{OC}(\text{O})(\text{CH}_2)_w$ -, $\text{R}^{9''}\text{R}^{10''}\text{N}(\text{CH}_2)_w$ -, $\text{R}^9\text{R}^{10'}\text{NC}(\text{O})(\text{CH}_2)_w$ -, $\text{R}^9\text{R}^{10}\text{NC}(\text{O})\text{N}(\text{R}^9)(\text{CH}_2)_w$ -, $\text{R}^9\text{OC}(\text{O})\text{N}(\text{R}^9)(\text{CH}_2)_w$ -, or halo, wherein w is an integer between 0 and 4 and R^9 and R^{10} are independently selected from hydrogen, C_{1-4} alkyl, C_{1-4} alkylsulphonyl and C_{3-7} carbocyclyl, R^9 and $\text{R}^{10'}$ are independently selected from C_{1-4} alkylsulphonyl and C_{3-7} carbocyclyl, and $\text{R}^{9''}$ and $\text{R}^{10''}$ are C_{3-7} carbocyclyl; wherein an amino group within R^{12} is optionally substituted by C_{1-4} alkyl;

R^{13} is C_{1-4} alkylaminocarbonyl wherein the alkyl group is optionally substituted by 1, 2 or 3 groups selected from R^{12} , or R^{13} is a group $-\text{C}(\text{O})-\text{R}^{18}$ and R^{18} is selected from an amino acid derivative or an amide of an amino acid derivative;

M is selected from $-\text{CH}_2-\text{CH}_2-$ or $-\text{CH}=\text{CH}-$;

n is an integer from 0 to 2;

p is an integer from 0 to 4;

s, **s1** and **s2** are independently selected from an integer from 0 to 4, and

s1+s2 is less than or equal to 4;

t is an integer between 0 and 4; and

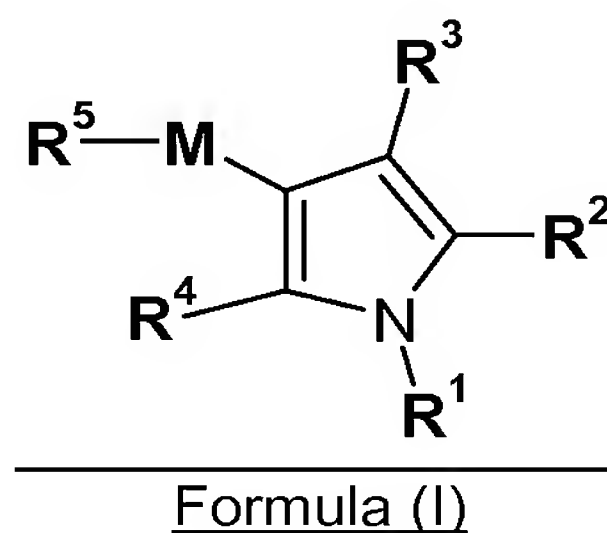
or a salt, solvate or pro-drug thereof to a patient, ~~in the manufacture of a medicament for~~

~~(a) antagonising gonadotropin-releasing hormone activity;~~

~~(b) administration to a patient, for reducing the secretion of luteinizing hormone by the pituitary gland of the patient; and~~

~~(c) administration to a patient, for therapeutically treating and/or preventing a sex hormone related condition in the patient.~~

2. (currently amended) A compound of formula (IA) which is a compound of formula (I) ~~as defined in claim 1;~~

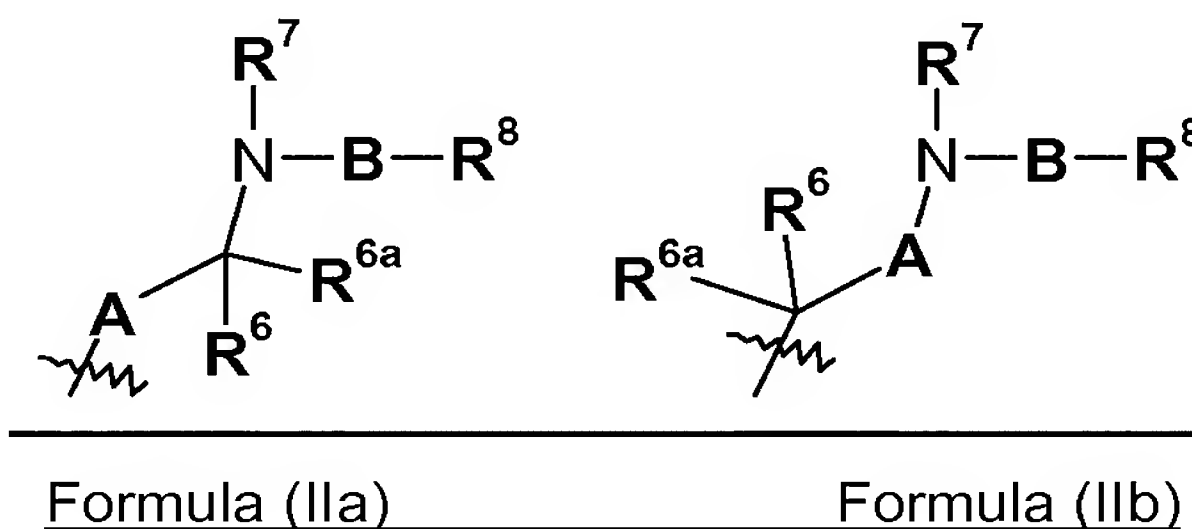


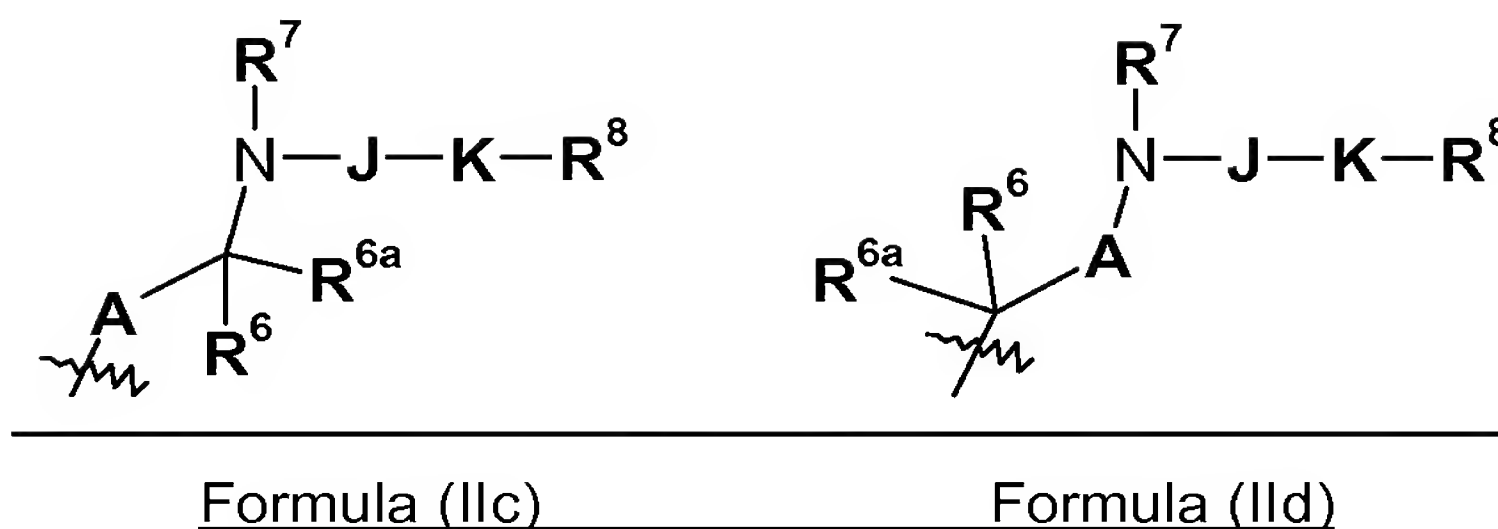
wherein:

R¹ is selected from: hydrogen, optionally substituted C₁₋₆alkyl, optionally substituted aryl or optionally substituted arylC₁₋₆alkyl, wherein the optional substituents are selected from C₁₋₄alkyl, nitro, cyano, fluoro and C₁₋₄alkoxy;

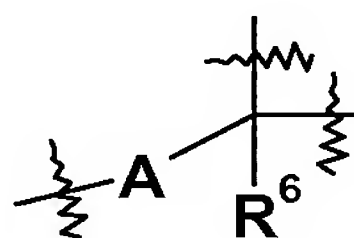
R² is an optionally substituted mono or bi-cyclic aromatic ring, wherein the optional substituents are 1, 2 or 3 substituents independently selected from: cyano, **R**^e**R**^fN-, C₁₋₆alkyl, C₁₋₆alkoxy, halo, haloC₁₋₆alkyl or haloC₁₋₆alkoxy wherein **R**^e and **R**^f are independently selected from hydrogen, C₁₋₆alkyl or aryl;

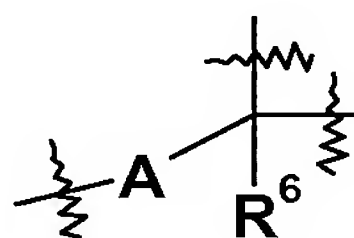
R³ is selected from a group of Formula (IIa) to Formula (IId):

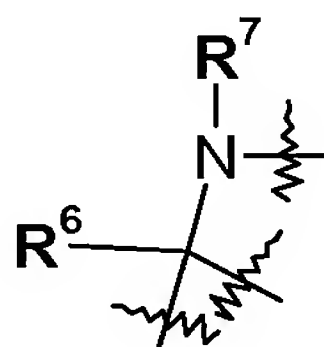


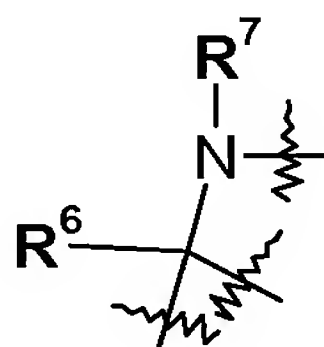


where \mathbf{R}^6 and \mathbf{R}^{6a} are independently selected from hydrogen, fluoro, optionally substituted C_{1-6} alkyl, C_{1-6} alkoxy, or \mathbf{R}^6 and \mathbf{R}^{6a} taken together and the carbon atom to which they are attached form a carbocyclic ring of 3-7 atoms or \mathbf{R}^6 and \mathbf{R}^{6a} taken together and the carbon atom to which they are attached form a carbonyl group;



or when \mathbf{A} is not a direct bond the group  forms a carbocyclic ring of 3-7 carbon atoms or a heterocyclic ring containing one or more heteroatoms;



or the group  forms a heterocyclic ring containing 3-7 carbon atoms and one or more heteroatoms;

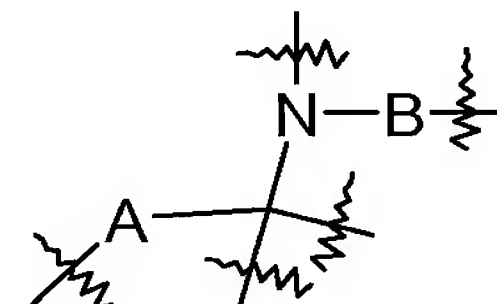
\mathbf{R}^7 is selected from: hydrogen or C_{1-6} alkyl;

\mathbf{R}^8 is selected from:

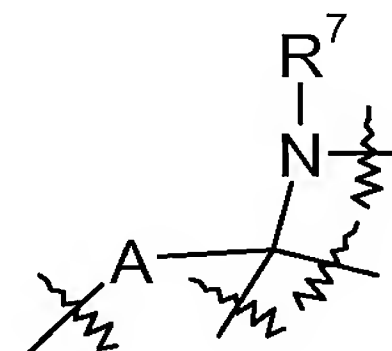
- (i) hydrogen, C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, halo C_{1-6} alkyl, C_{1-4} alkoxy C_{1-4} alkyl, hydroxy, hydroxy C_{1-6} alkyl, cyano, N- C_{1-4} alkylamino, N,N-di- C_{1-4} alkylamino, C_{1-6} alkyl- $\text{S}(\text{O}_n)$ -, $-\text{O}-\mathbf{R}^b$, $-\text{NR}^b\mathbf{R}^c$, $-\text{C}(\text{O})-\mathbf{R}^b$, $-\text{C}(\text{O})\text{O}-\mathbf{R}^b$, $-\text{CONR}^b\mathbf{R}^c$, $\text{NH}-\text{C}(\text{O})-\mathbf{R}^b$ or $-\text{S}(\text{O}_n)\text{NR}^b\mathbf{R}^c$,
where \mathbf{R}^b and \mathbf{R}^c are independently selected from hydrogen and C_{1-6} alkyl optionally substituted with hydroxy, amino, N- C_{1-4} alkylamino, N,N-di- C_{1-4} alkylamino, $\text{HO}-\text{C}_{2-4}$ alkyl-NH- or $\text{HO}-\text{C}_{2-4}$ alkyl-N(C_{1-4} alkyl)-;
- (ii) nitro when \mathbf{B} is a group of Formula (IV) and \mathbf{X} is CH and \mathbf{p} is 0;
- (iii) carbocyclyl (such as C_{3-7} cycloalkyl or aryl) or aryl C_{1-6} alkyl each of which is optionally substituted by \mathbf{R}^{12} , or \mathbf{R}^{13} ;
- (iv) heterocyclyl or heterocyclyl C_{1-6} alkyl each of which is optionally substituted by up to 4 substituents independently selected from \mathbf{R}^{12} or \mathbf{R}^{13} , and where any nitrogen atoms within a heterocyclyl group are, where chemically allowed, optionally in their oxidised ($\text{N} \rightarrow \text{O}$, N-OH) state;

\mathbf{A} is selected from:

- (i) a direct bond;
- (ii) optionally substituted C_{1-5} alkylene wherein the optional substituents are independently selected from: hydroxy, hydroxy C_{1-6} alkyl, C_{1-6} alkyl, C_{1-6} alkoxy, C_{1-4} alkoxy C_{1-4} alkyl, aryl or aryl C_{1-6} alkyl;
- (iii) a carbocyclic ring of 3-7 atoms;
- (iv) a carbonyl group or $-C(O)-C(R^dR^d)-$, wherein R^d is independently selected from hydrogen and C_{1-2} alkyl;



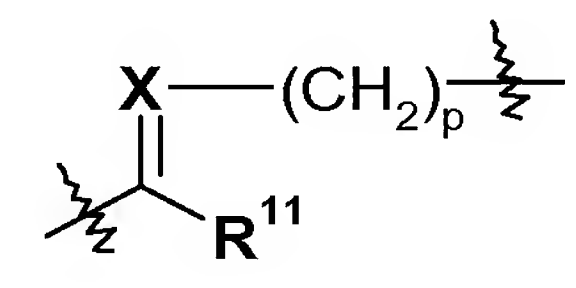
or when R^3 is a group of Formula (IIa) or (IIb), the group forms a heterocyclic ring containing 3-7 carbon atoms and one or more heteroatoms;



or when R^3 is a group of Formula (IIa), (IIb), (IIc) or (IId), the group forms a heterocyclic ring containing 3-7 carbon atoms and one or more heteroatoms;

B is selected from:

- (i) a direct bond;
- (ii) a group of Formula (IV)



Formula (IV)

wherein:

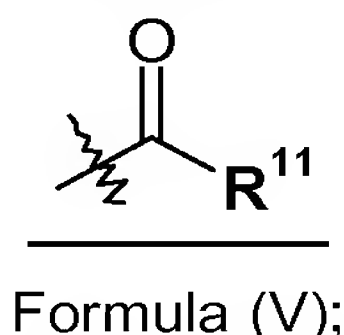
X is selected from N or CH,

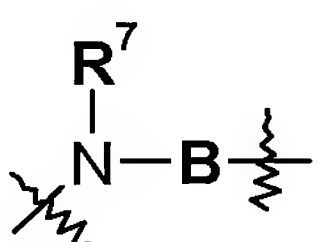
wherein at position (a) Formula (IV) is attached to the nitrogen atom and the $(CH_2)_p$ group is attached to R^8 ; and

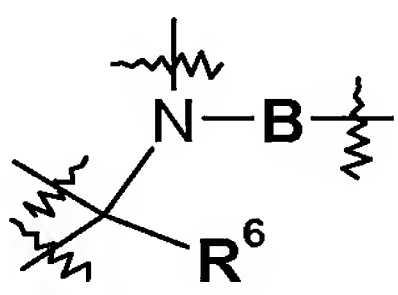
- (iii) a group independently selected from: optionally substituted C_{1-6} alkylene, optionally substituted C_{3-7} cycloalkyl, optionally substituted C_{3-6} alkenylene, optionally substituted C_{3-6} alkynyl, $(C_{1-5}alkyl)_{aa}-S(O_n)-(C_{1-5}alkyl)_{bb}-$, $-(C_{1-5}alkyl)_{aa}-O-(C_{1-5}alkyl)_{bb}-$, $-(C_{1-5}alkyl)_{aa}-C(O)-(C_{1-5}alkyl)_{bb}-$ or $(C_{1-5}alkyl)_{aa}-N(R^{17})-(C_{1-5}alkyl)_{bb}-$ or $-(C_{1-5}alkyl)_{aa}-C(O)NH-(C_{1-5}alkyl)_{bb}-$

where R^{17} is hydrogen or C_{1-4} alkyl, or where R^{17} and the $(C_{1-5}alkyl)_{aa}$ or $(C_{1-5}alkyl)_{bb}$ chain can be joined to form a heterocyclic ring, wherein aa and bb are independently 0 or 1

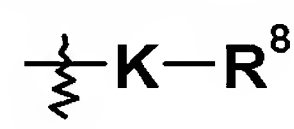
and the combined length of $(C_{1-5}alkyl)_{aa}$ and $(C_{1-5}alkyl)_{bb}$ is less than or equal to C_5alkyl
 and wherein the optional substituents are independently selected from R^{12} ;
 or the group $-B-R^8$ represents a group of Formula (V)



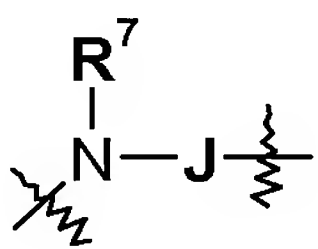
or the group  together forms an optionally substituted heterocyclic ring
 containing 4-7 carbons atoms, wherein the optional substituents are selected from 1 or
 2 substituents independently selected from R^{12} and R^{13} ;

or the group  forms a heterocyclic ring containing 3-7 carbon atoms and
 one or more heteroatoms;

R^{11} is selected from: hydrogen, optionally substituted $C_{1-6}alkyl$, $N(R^{23}R^{24})$ or $NC(O)OR^{25}$,
 where R^{23} , R^{24} and R^{25} are independently selected from: hydrogen, hydroxy, optionally
 substituted $C_{1-6}alkyl$, optionally substituted aryl, optionally substituted aryl $C_{1-6}alkyl$, an
 optionally substituted carbocyclic ring of 3-7 atoms, optionally substituted heterocyclyl or
 optionally substituted heterocyclyl $C_{1-6}alkyl$ or R^{23} and R^{24} taken together with the nitrogen
 atom to which they are attached, can form an optionally substituted ring of 3-10 atoms,

wherein the optional substituents are selected from R^{12} and  where K and R^8 are
 as defined herein;

J is a group of the formula: $-(CH_2)_s-L-(CH_2)_s-$ or $-(CH_2)_s-C(O)-(CH_2)_s-L-(CH_2)_s-$ wherein
 when s is greater than 0, the alkylene group is optionally substituted,

or the group  together forms an optionally substituted heterocyclic ring
 containing 4-7 carbons atoms, wherein the optional substituents are selected from 1 or 2
 substituents independently selected from R^{12} and R^{13} ;

K is selected from: a direct bond, $-(CH_2)_{s1}-$, $-(CH_2)_{s1}-O-(CH_2)_{s2}-$, $-(CH_2)_{s1}-C(O)-(CH_2)_{s2}-$,
 $-(CH_2)_{s1}-S(O_n)-(CH_2)_{s2}-$, $-(CH_2)_{s1}-N(R^{17a})-(CH_2)_{s2}-$, $-(CH_2)_{s1}-C(O)N(R^{17a})-(CH_2)_{s2}-$,
 $-(CH_2)_{s1}-N(R^{17a})C(O)-(CH_2)_{s2}-$, $-(CH_2)_{s1}-N(R^{17a})C(O)N(R^{17a})-(CH_2)_{s2}-$, $-(CH_2)_{s1}-OC(O)-(CH_2)_{s2}-$,

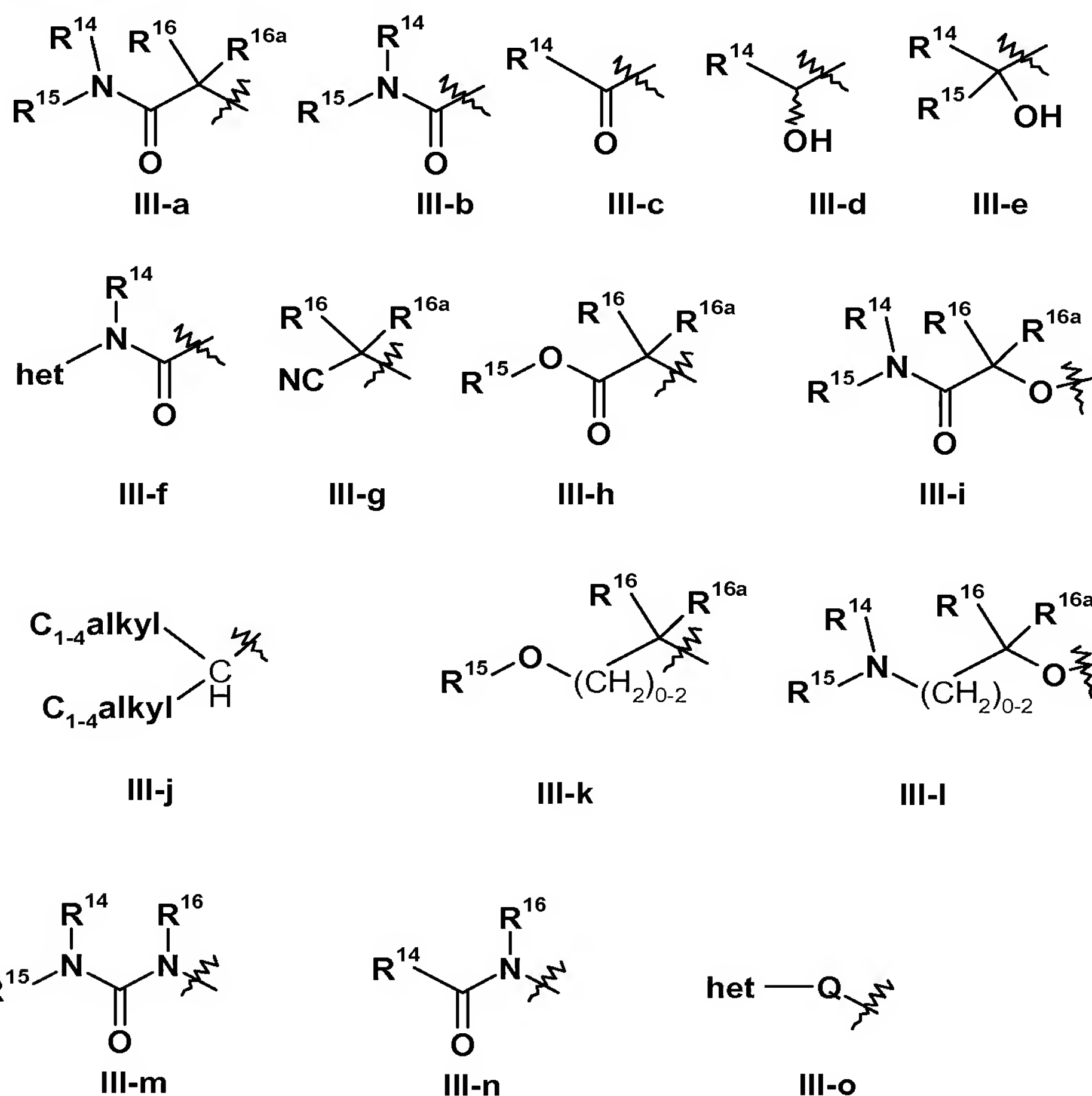
$-(CH_2)_{s1}-C(O)O-(CH_2)_{s2}-$, $-(CH_2)_{s1}-N(R^{17a})C(O)O-(CH_2)_{s2}-$, $-(CH_2)_{s1}-OC(O)N(R^{17a})-(CH_2)_{s2}-$, $-(CH_2)_{s1}-OS(O_n)-(CH_2)_{s2}-$, or $-(CH_2)_{s1}-S(O_n)-O-(CH_2)_{s2}-$, $-(CH_2)_{s1}-S(O)_2N(R^{17a})-(CH_2)_{s2}-$ or $-(CH_2)_{s1}-N(R^{17a})S(O)_2-(CH_2)_{s2}-$; wherein the $-(CH_2)_{s1}-$ and $-(CH_2)_{s2}-$ groups are independently optionally substituted by hydroxy or C_{1-4} alkyl and wherein when $s1 > 1$ or $s2 > 1$ then the CH_2 group can optionally be a branched chain.;

where R^{17a} is hydrogen or C_{1-4} alkyl;

L is selected from optionally substituted aryl or optionally substituted heterocyclyl;

R^4 is selected from hydrogen, C_{1-4} alkyl or halo;

R^5 is selected from a group of Formula III-a; III-b; III-c; III-d; III-e; III-f, III-g, III-h, III-i, or III-j, III-k, III-l, III-m, III-n or III-o



wherein:

het represents an optionally substituted 3- to 8-membered heterocyclic ring

containing from 1 to 4 heteroatoms independently selected from O, N and S,

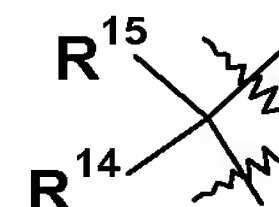
wherein the optional substituents are selected from 1-2 groups selected from R^{12}

and R^{13} ; and

Q is selected from a direct bond or $-[C(R^{16}R^{16a})]_{1-2}$;

R^{14} and R^{15} are selected from:

- (i) R^{14} selected from hydrogen; optionally substituted C_{1-8} alkyl; optionally substituted aryl; $-R^d$ -Ar, where R^d represents C_{1-8} alkylene and Ar represents optionally substituted aryl; and optionally substituted 3- to 8-membered heterocyclic ring optionally containing from 1 to 3 further heteroatoms independently selected from O, N and S; and R^{15} is selected from hydrogen; optionally substituted C_{1-8} alkyl and optionally substituted aryl;
- (ii) wherein the group of Formula (III) represents a group of Formula III-a , III-b, III-i, III-l or III-m, then the group $NR^{14}(-R^{15})$ represents an optionally substituted 3- to 8-membered heterocyclic ring optionally containing from 1 to 3 further heteroatoms independently selected from O, N and S; or



- (iii) wherein the group of Formula (III) represents structure III-e, represents an optionally substituted 3- to 8-membered heterocyclic ring optionally containing from 1 to 4 heteroatoms independently selected from O, N and S;

R^{16} and R^{16a} are independently selected from:

- (i) hydrogen or optionally substituted C_{1-8} alkyl; or
- (ii) R^{16} and R^{16a} together with the carbon to which they are attached form an optionally substituted 3 to 7-membered cycloalkyl ring;

R^{12} is independently selected from: halo, hydroxy, hydroxy C_{1-6} alkyl, oxo, cyano, cyano C_{1-6} alkyl, nitro, carboxyl, C_{1-6} alkyl, C_{1-6} alkoxy, C_{1-6} alkoxy C_{1-4} alkyl, C_{1-6} alkoxycarbonyl C_{0-4} alkyl, C_{1-6} alkanoyl C_{0-4} alkyl, C_{1-6} alkanoyloxy C_{0-4} alkyl, C_{2-6} alkenyl, C_{1-3} perfluoroalkyl-, C_{1-3} perfluoroalkoxy, aryl, aryl C_{1-6} alkyl, heterocyclyl, heterocyclyl C_{1-6} alkyl, amino C_{0-4} alkyl, **N**- C_{1-4} alkylamino C_{0-4} alkyl, **N**, **N**-di- C_{1-4} alkylamino C_{0-4} alkyl, carbamoyl, **N**- C_{1-4} alkylcarbamoyl C_{0-2} alkyl, **N**, **N**-di- C_{1-4} alkylaminocarbamoyl C_{0-2} alkyl, aminocarbonyl C_{0-4} alkyl, **N**- C_{1-6} alkylaminocarbonyl C_{0-4} alkyl, **N**, **N**- C_{1-6} alkylaminocarbonyl C_{0-4} alkyl, C_{1-6} alkyl-S(O) $_n$ -amino C_{0-4} alkyl-, aryl-S(O) $_n$ -amino C_{0-2} alkyl-, C_{1-3} perfluoroalkyl-S(O) $_n$ -amino C_{0-2} alkyl-, C_{1-6} alkylamino-S(O) $_n$ - C_{0-2} alkyl-, arylamino-S(O) $_n$ - C_{0-2} alkyl-, C_{1-3} perfluoroalkylamino-S(O) $_n$ - C_{0-2} alkyl-, C_{1-6} alkanoylamino-S(O) $_n$ - C_{0-2} alkyl-, arylcarbonylamino-S(O) $_n$ - C_{0-2} alkyl-, C_{1-6} alkyl-S(O) $_n$ - C_{0-2} alkyl-, aryl-S(O) $_n$ - C_{0-2} alkyl-, C_{1-3} perfluoroalkyl-, C_{1-3} perfluoroalkoxy C_{0-2} alkyl; $R^9OC(O)(CH_2)_w$ -, $R^9R^{10}N(CH_2)_w$ -, $R^9R^{10}NC(O)(CH_2)_w$ -, $R^9R^{10}NC(O)N(R^9)(CH_2)_w$ -, $R^9OC(O)N(R^9)(CH_2)_w$ -, or halo, wherein w is an integer between 0 and 4 and R^9 and R^{10} are independently selected from hydrogen, C_{1-4} alkyl,

C₁₋₄alkylsulphonyl and C₃₋₇carbocyclyl, **R**⁹ and **R**^{10'} are independently selected from C₁₋₄alkylsulphonyl and C₃₋₇carbocyclyl, and **R**^{9''} and **R**^{10''} are C₃₋₇carbocyclyl; wherein an amino group within **R**¹² is optionally substituted by C₁₋₄alkyl;

R¹³ is C₁₋₄alkylaminocarbonyl wherein the alkyl group is optionally substituted by 1, 2 or 3 groups selected from **R**¹², or **R**¹³ is a group –C(O)–**R**¹⁸ and **R**¹⁸ is selected from an amino acid derivative or an amide of an amino acid derivative;

M is selected from –CH₂–CH₂– or –CH=CH–;

n is an integer from 0 to 2;

p is an integer from 0 to 4;

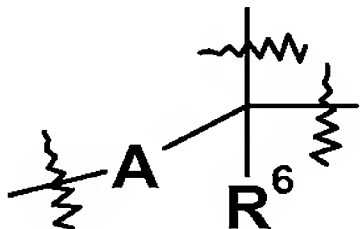
s, **s1** and **s2** are independently selected from an integer from 0 to 4, and

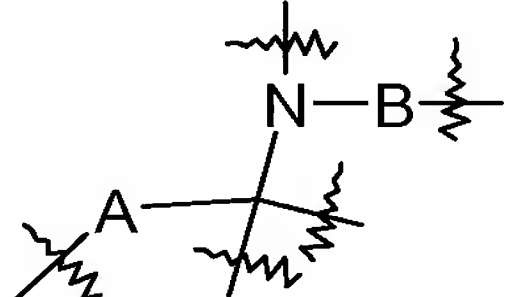
s1+s2 is less than or equal to 4;

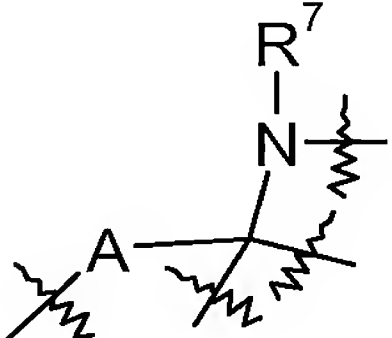
t is an integer between 0 and 4; and

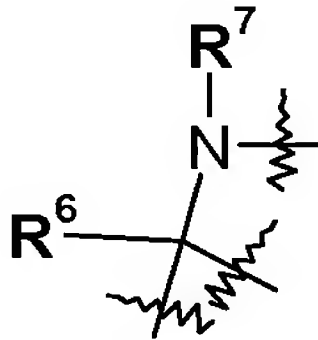
or a salt, solvate or pro-drug thereof;

with the proviso that when

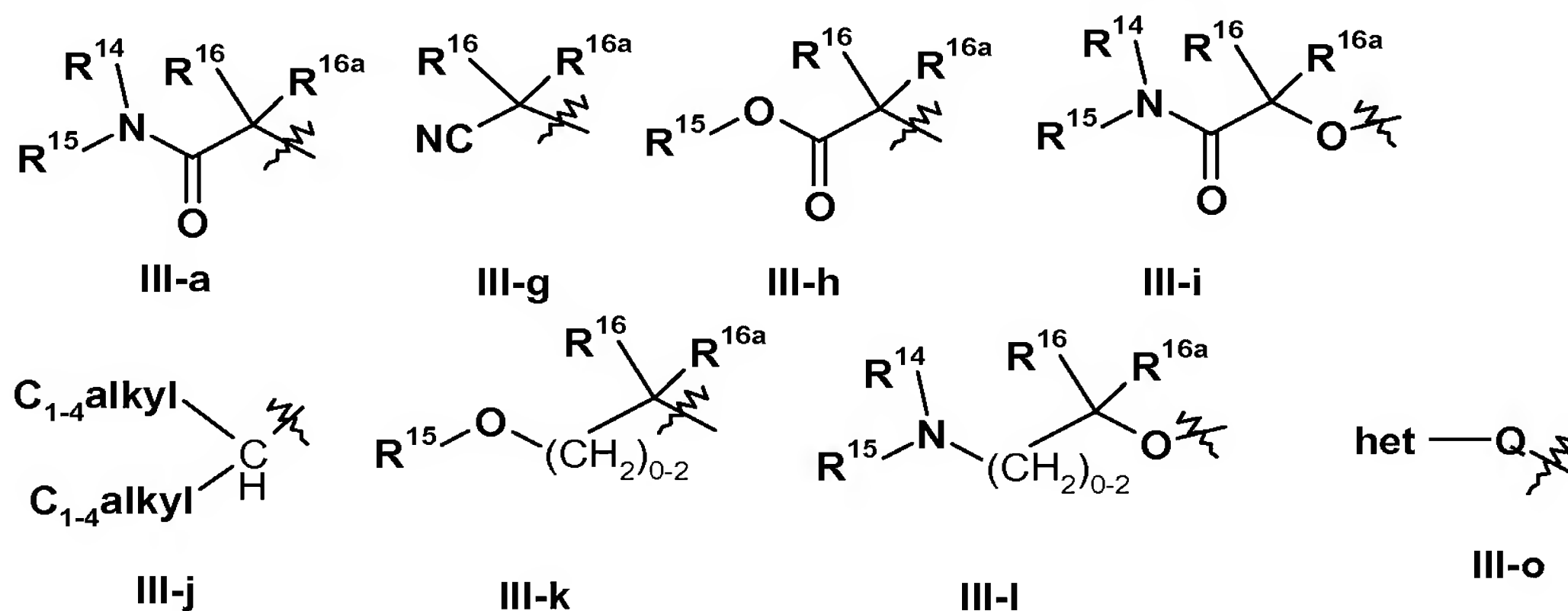
- (i) the group  forms an aromatic carbocyclic ring of 3-7 carbon atoms or an aromatic heterocyclic ring containing one or more heteroatoms, or

- (ii) when **R**³ is a group of Formula (IIa) or (IIb), and the group  forms an aromatic heterocyclic ring containing 3-7 carbon atoms and one or more heteroatoms; or
- (iii) when **R**³ is a group of Formula (IIa), (IIb), (IIc) or (IId), and the group

-  forms an aromatic heterocyclic ring containing 3-7 carbon atoms and one or more heteroatoms, or

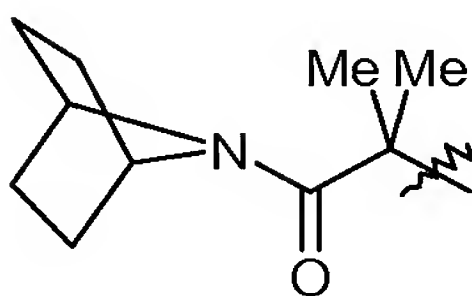
- (iv) when the group  forms an aromatic heterocyclic ring containing 3-7 carbon atoms and one or more heteroatoms and A is a direct bond; then **R**⁵ is other than a group III-o.

3. (original) A compound according to claim 2 wherein the group **A** is selected from (i) a direct bond or (ii) optionally substituted C₁₋₅alkylene wherein the optional substituents are independently selected from: hydroxy, hydroxyC₁₋₆alkyl, C₁₋₆alkyl, C₁₋₆alkoxy, C₁₋₄alkoxyC₁₋₄alkyl, aryl or arylC₁₋₆alkyl.
4. (currently amended) A compound according to claim 2 ~~or claim 3~~ which includes a group **R**¹³ and wherein the group **R**¹³ is –C(O)–**R**¹⁸, and **R**¹⁸ is selected from an amino acid derivative or an amide of an amino acid derivative; or a salt, solvate or pro-drug thereof.
5. (currently amended) A compound according to claim 2 ~~any one of claims 2 to 4~~ wherein **R**¹ is selected from hydrogen, optionally substituted C₁₋₆alkyl or optionally substituted arylC₁₋₆alkyl, wherein the optional substituents ~~substituents~~ are selected from: fluoro and C₁₋₄alkoxy.
6. (currently amended) A compound according to claim 2 ~~any one of claims 2 to 5~~ wherein **R**² is phenyl, optionally substituted ~~substituted~~ by one or more groups selected from methyl, ethyl, methoxy, ethoxy, *tert*-butoxy, F or Cl.
7. (currently amended) A compound according to claim 2 ~~any one of claims 2 to 6~~ wherein **R**³ is selected from a group of formula (IIc) or formula (IId).
8. (currently amended) A compound according to claim 2 ~~any one of claims 2 to 7~~ wherein **R**⁴ is selected from hydrogen, methyl, ethyl, chloro or bromo.
9. (currently amended) A compound according to claim 2 ~~any one of claims 2 to 8~~ wherein **R**⁵ is selected from a group of Formula **III-a** , **III-g**, **III-h**, **III-i**, **III-j**, **III-k** , **III-l**: or **III-o**



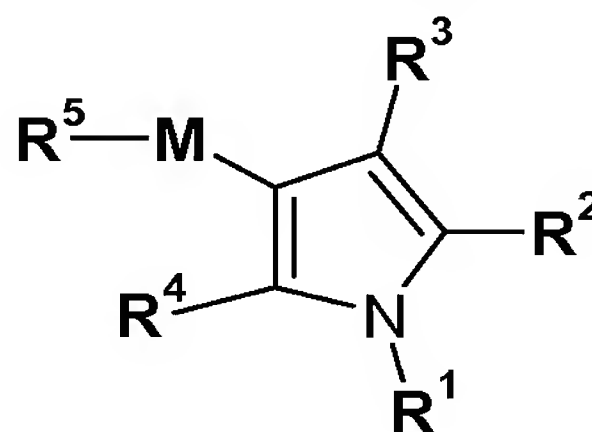
wherein **R**¹⁶, **R**^{16a}, **R**¹⁴ and **R**¹⁵ are as defined in claim 2[[1]].

10. (original) A compound according to claim 9 wherein R^5 is a group of formula



11. (currently amended) A compound according to claim 2 ~~any one of claims 2 to 10~~ wherein **M** is $-\text{CH}_2\text{-CH}_2-$.

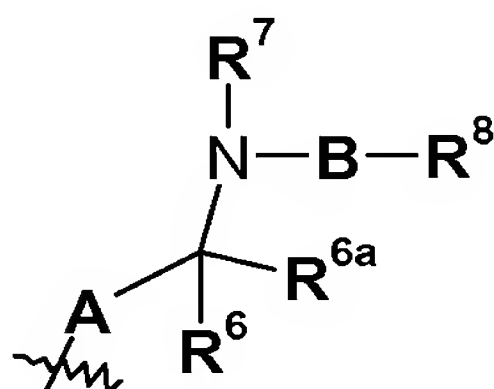
12. (currently amended) A compound of Formula (Ia) as claimed in claim 2



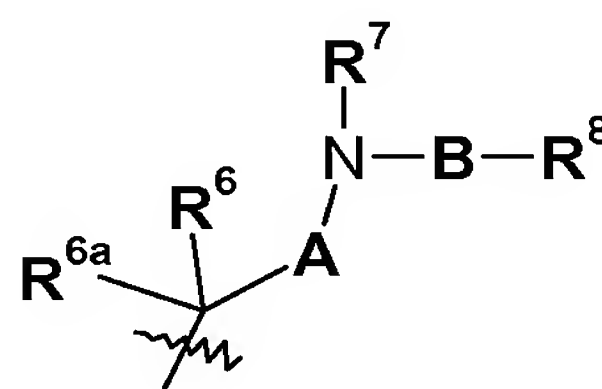
Formula (Ia)

wherein:

R^3 is selected from a group of Formula (IIa) or Formula (IIb):



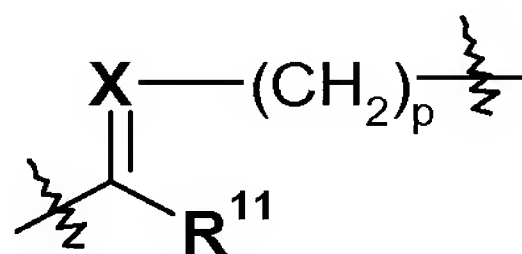
Formula (IIa)



Formula (IIb)

R^7 is selected from: hydrogen or C_{1-6} alkyl;

B is a group of Formula (IV)

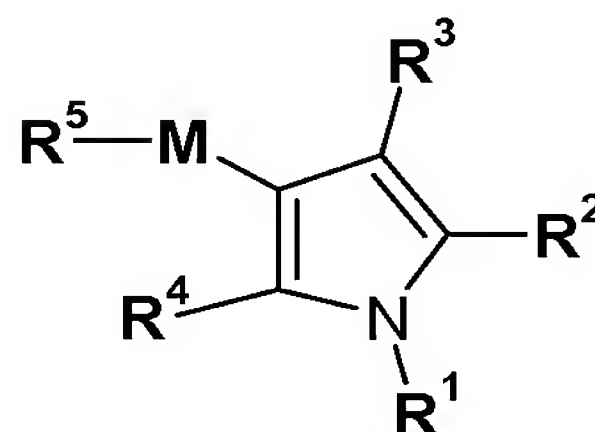


Formula (IV)

and p , **A**, **X**, **M**, R^1 , R^2 , R^4 , R^5 , R^6 , R^{6a} , R^8 , and R^{11} are as defined in claim 2 ~~above for a compound of Formula (I)~~

or a salt, solvate or pro-drug thereof.

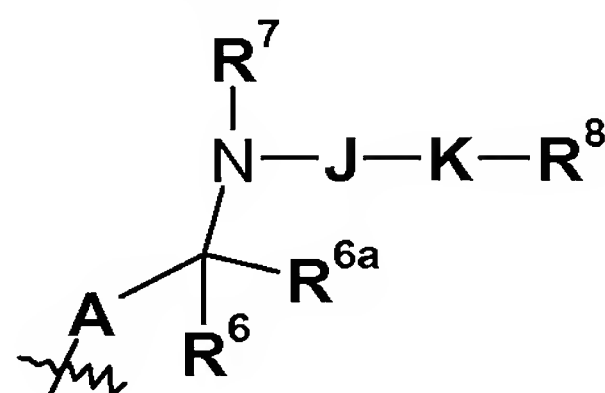
13. (currently amended) A compound of Formula (Ic) which is a compound of formula (Ia) as claimed in claim 2 wherein:



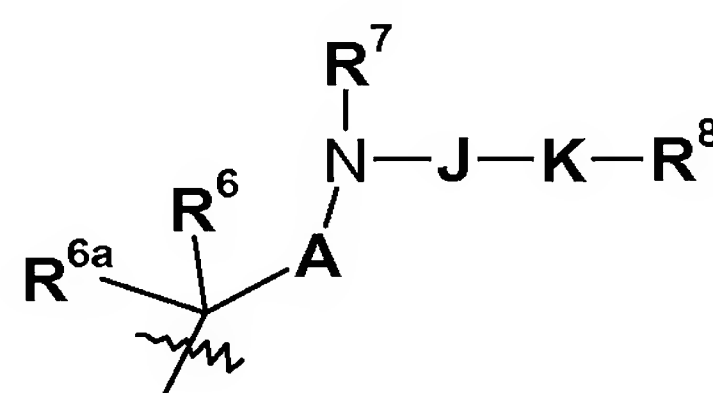
Formula (Ic)

wherein:

R^3 is selected from a group of Formula (IIc) or Formula (IId):

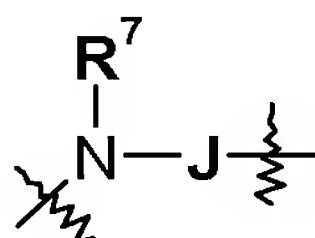


Formula (IIc)



Formula (IId)

wherein



the group together forms an optionally substituted heterocyclic ring containing 4-7 carbons atoms, wherein the optional substituents are selected from 1 or 2 substituents independently selected from R^{12} and R^{13} ;

and **A**, **M**, **J**, R^1 , R^2 , R^4 , R^5 , R^6 , R^{6a} , R^8 , and R^{12} and R^{13} are as defined in claim 2[[1]], or a salt, solvate or pro-drug thereof.

14. (currently amended) A compound selected from:

3-[3,3-dimethyl-4-oxo-4-(azabicyclo[2.2.1]heptan-7-yl)butyl]-4-[2-{4-(morpholin-4-ylcarbonyl)piperidin-1-yl}ethyl]-5-(3,5-dimethylphenyl)-1H-pyrrole;

3-[3,3-dimethyl-4-oxo-4-(azabicyclo[2.2.1]heptan-7-yl)but-2-en-1-yl]-4-

[1s-methyl-2-(n'-isopropoxycarbonyl-3-pyrid-4-yl-pyrrolidin-1-ylcarboximidamido) ethyl]-5-(3,5-dimethylphenyl)-1h-pyrrole;

3-[3,3-~~dimethyl~~Dimethyl-4-oxo-4-(azabicyclo[2.2.1]heptan-7-yl)butyl]-4-[1S-methyl-2-(N'-isopropoxycarbonyl-3-pyrid-4-yl-pyrrolidin-1-ylcarboximidamido) ethyl]-5-(3,5-dimethylphenyl)-1H-pyrrole;

3-[3,3-~~dimethyl~~Dimethyl-4-oxo-4-(azabicyclo[2.2.1]heptan-7-yl)butyl]-4-[2-{4-(pyrrolidin-1-ylcarbonyl)piperazin-1-yl}ethyl]-5-(3,5-dimethylphenyl)-1H-pyrrole;

2-chloro-3-[3,3-dimethyl-4-oxo-4-(azabicyclo[2.2.1]heptan-7-yl)butyl]-4-[2-{4-(pyrrolidin-1-ylcarbonyl)piperazin-1-yl}ethyl]-5-(3,5-dimethylphenyl)-1h-pyrrole;

3-[3,3-dimethyl-4-oxo-4-(azabicyclo[2.2.1]heptan-7-yl)butyl]-4-[2-{4-(4-hydroxypiperidin-1-ylcarbonyl)piperidin-1-yl}ethyl]-5-(3,5-dimethylphenyl)-1h-pyrrole;

3-[3,3-dimethyl-4-oxo-4-(azabicyclo[2.2.1]heptan-7-yl)butyl]-4-[2-{4-(1,1-dioxo-isothiazolidin-2-ylcarbonyl)-4-methoxy-piperidin-1-yl}ethyl]-5-(3,5-dimethylphenyl)-1h-pyrrole;

3-[3,3-dimethyl-4-oxo-4-(azabicyclo[2.2.1]heptan-7-yl)butyl]-4-[1s-methyl-2-{1-benzyl-pyrroldin-3-ylamino}ethyl]-5-(3,5-dimethylphenyl)-1h-pyrrole;

3-[3,3-dimethyl-4-oxo-4-(azabicyclo[2.2.1]heptan-7-yl)butyl]-4-[1s-methyl-2-(2-{4-n-isopropylureidophenyl}ethylamino)ethyl]-5-(3,5-dimethylphenyl)-1h-pyrrole;

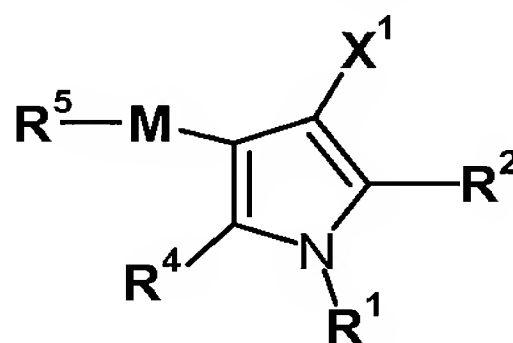
3-[3,3-dimethyl-4-oxo-4-(azabicyclo[2.2.1]heptan-7-yl)butyl]-4-[1s-methyl-2-{4-(pyrid-4-yl)piperidin-1-ylcarbonylamino}ethyl]-5-(3,5-dimethylphenyl)-1h-pyrrole;

3-[3,3-dimethyl-4-oxo-4-(azabicyclo[2.2.1]heptan-7-yl)butyl]-4-[1s-methyl-2-{3-(pyrid-4-yl)pyrrolidin-1-ylcarbonylamino}ethyl]-5-(3,5-dimethylphenyl)-1h-pyrrole; and

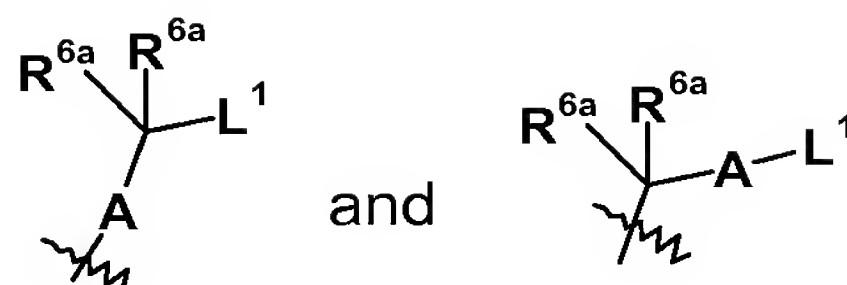
3-[3,3-dimethyl-4-oxo-4-(azabicyclo[2.2.1]heptan-7-yl)butyl]-4-[1s-methyl-2-{4-phenylpiperidin-1-ylcarbonylamino}ethyl]-5-(3,5-dimethylphenyl)-1h-pyrrole.

15. (currently amended) A process for preparing a compound of formula (I) as defined in claim 2 4, ~~or a compound according to any one of claims 2 to 14~~, said process comprising a step selected from (a) to (h):

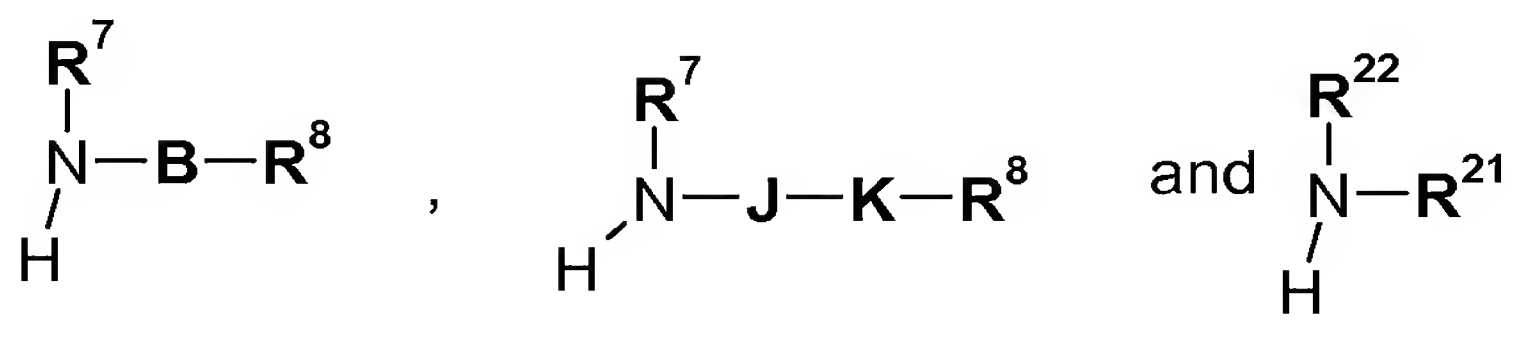
(a) reaction of a compound of formula **XXXII** with a compound of formula H-**R**^{3'},



XXXII

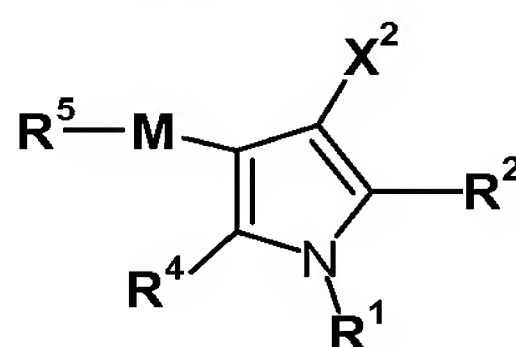


wherein \mathbf{X}^1 is selected from: ; \mathbf{L}^1 is a displaceable group; and

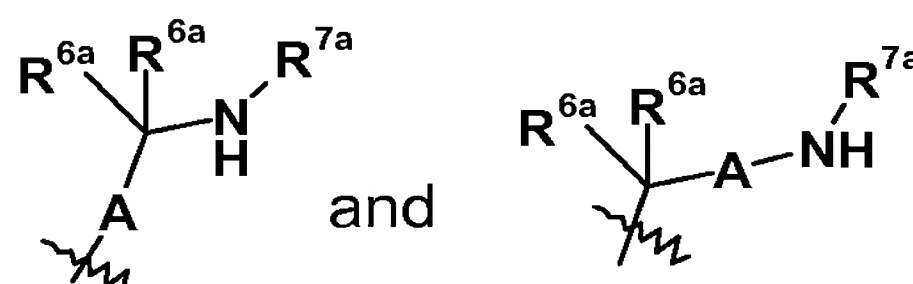


$\mathbf{H-R}^{3'}$ is selected from:

- (b) reaction of a compound of formula **XXXIII** with a compound of formula $\mathbf{L}^2\text{-R}^{3''}$,



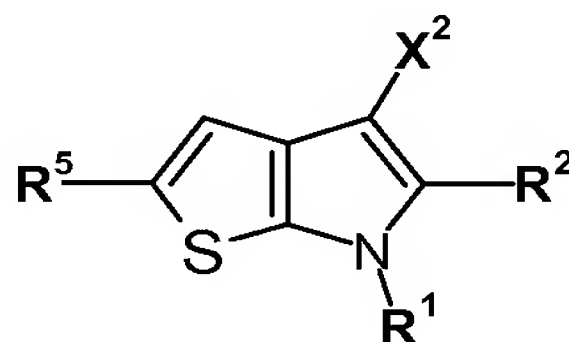
XXXIII



wherein \mathbf{X}^2 is selected from: ; \mathbf{L}^2 is a displaceable group and \mathbf{R}^{7a} is selected from the definition of \mathbf{R}^7 or \mathbf{R}^{22} above, and

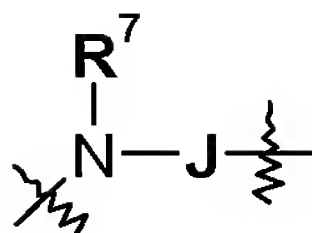
$\mathbf{L}^2\text{-R}^{3''}$ is selected from: $\mathbf{L}^2\text{—B—R}^8$, $\mathbf{L}^2\text{—J—K—R}^8$ and $\mathbf{L}^2\text{—R}^{21}$

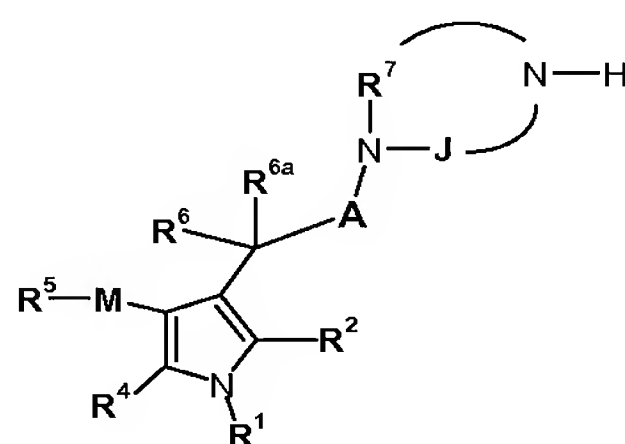
- (c) for compounds of Formula (I) or (IA) wherein \mathbf{R}^7 is other than part of a heterocyclic ring or hydrogen, reaction of a compound of Formula (I) or (IA) wherein \mathbf{R}^3 is a group of Formula (IIa), (IIb), (IIc) or (IId) and \mathbf{R}^7 is hydrogen with a group of formula $\mathbf{L}^3\text{-R}^{7a}$, wherein \mathbf{R}^{7a} is as defined above for \mathbf{R}^7 with the exclusion of hydrogen and \mathbf{L}^3 is a displaceable group;
- (d) for compounds of Formula (I) or (IA) wherein \mathbf{R}^4 is hydrogen, reduction of a thienopyrrole of Formula XXXVII



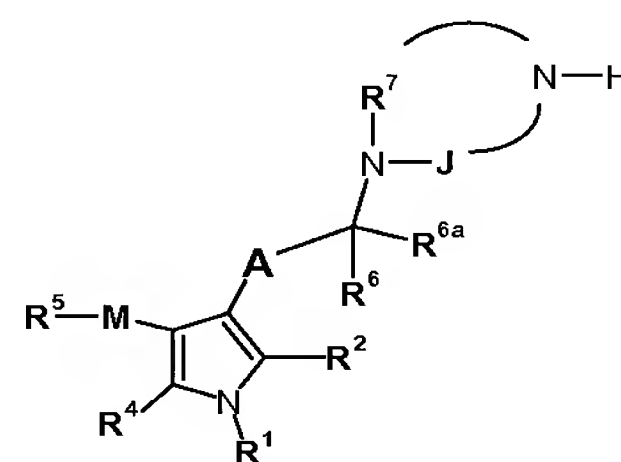
XXXVII

- (e) for compounds of Formula (I) wherein \mathbf{R}^3 is a group of Formula (IIc) or (IId) and

the group  together forms an optionally substituted nitrogen-containing heterocyclic ring containing 4-7 carbons atoms, reaction of a compound of Formula **XXXIVa** or **XXXIVb**, with a compound of Formula **L⁶-K-R⁸**, wherein **L⁶** is a displaceable group

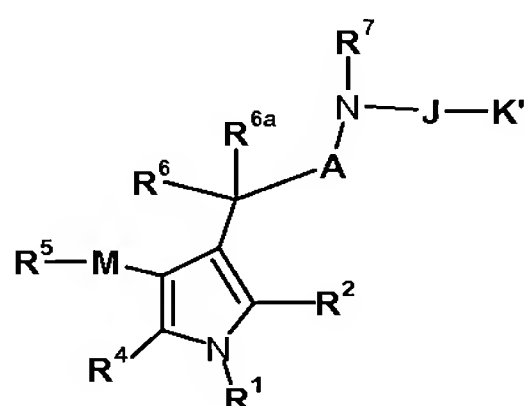


XXXIVa

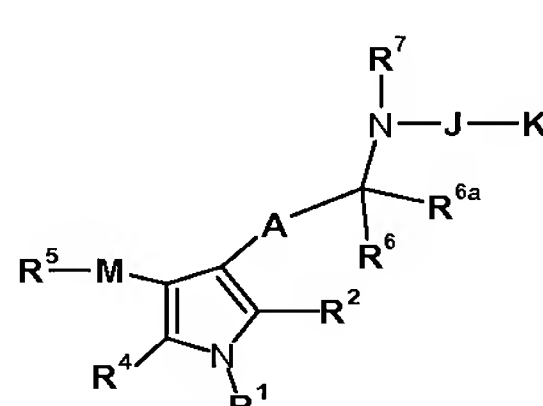


XXXIVb

- (f) for compounds of Formula (I) wherein **R³** is a group of Formula (IIc) or (IId), reaction of a compound of Formula **XXXVa** or **XXXVb**, with a compound of Formula **L⁷-K''-R⁸**, wherein **L⁷** is a displaceable group, and wherein the groups **K'** and **K''** comprise groups which when reacted together form **K**,

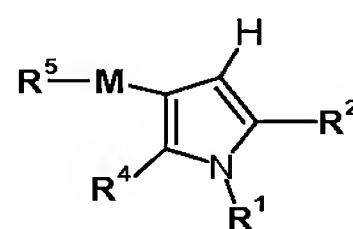


XXXVa



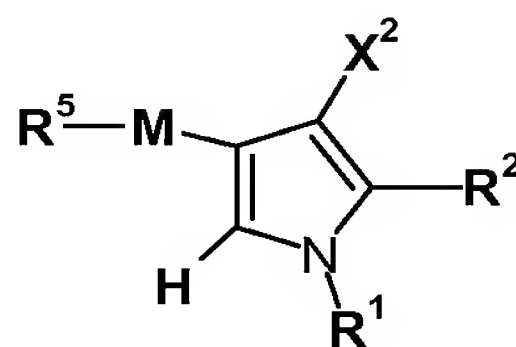
XXXVb

- (g) reaction of a compound of Formula **XXXVI** with an electrophillic compound of the formula **L⁸-R³**, wherein **L⁸** is a displaceable group



XXXVI

- (h) reaction of a compound of Formula XXXIX with an appropriate electrophilic reagent to give a compounds of Formula (I)



XXXIX

and thereafter if necessary, carrying out one or more of the following steps:

- i) converting a compound of the Formula (I) into another compound of the Formula (I);
- ii) removing any protecting groups;
- iii) forming a salt, pro-drug or solvate.

16. (currently amended) A pharmaceutical formulation comprising a compound according to claim 2 ~~any one of claims 2 to 14~~, or salt, pro-drug or solvate thereof, and a pharmaceutically acceptable diluent or carrier.

17-18. (cancelled)